

TABLE 1.

Number of postmenopausal women with fractures
according to VDR Genotype

VDR Genotype	No. with fracture / total No. (%)
11	34 / 255 (13.3)
12	35 / 375 (9.3)
13	13 / 101 (12.9)
22	7 / 179 (3.9)
23	6 / 82 (7.3)
33	2 / 12 (16.7)
Chi2	13.3
P Value	0.04

TABLE 2.
Characteristics of 1004 postmenopausal women according to their VDR haplotype 1 genotype

Characteristic *	VDR genotype ⁺			P Value
	Reference (n = 273)	Heterozygotes (n = 476)	Homozygotes (n = 255)	
Age (yr)	66.4 ± 7.0	67.4 ± 7.0	67.1 ± 6.7	0.19
Height (cm)	162.3 ± 6.3	162.1 ± 6.0	161.7 ± 7.5	0.66
Weight (Kg)	68.9 ± 9.7	68.6 ± 10.5	69.3 ± 10.5	0.70
Age at menopause (yr)	49 ± 5	49 ± 5	49 ± 5	0.35
Dietary calcium intake (mg/day)	1076 ± 335	1103 ± 329	1073 ± 287	0.42
Current smoker (%)	20	21	24	0.51
Femoral Neck Bone Mineral density (g/cm ²)	0.82 ± 0.15	0.80 ± 0.12	0.81 ± 0.13	0.21

* Plus-minus values are means ± SD

+ "Reference" includes VDR genotypes 22, 23, 33; "Heterozygotes" includes 12, 13; "Homozygotes" includes 11

TABLE 3.
Number of postmenopausal women with fractures and Odds Ratios for fracture according to VDR halotype 1 genotype and according to COLIA1 genotype

Genotype ⁺	Fracture No. with fracture/total No. (%)	Age-adjusted	Odds Ratio (95% CI)	Multivariate*
a. By VDR haplotype 1 genotype				
Reference	15 / 273 (5.5)	1.0	1.0	
Heterozygotes	48 / 476 (10.1)	1.8 (1.0 - 3.3)	1.6 (0.8 - 3.1)	
Homozygotes	34 / 255 (13.3)	2.6 (1.4 - 5.0)	2.4 (1.2 - 4.8)	
Chi2	9.47			
P Value	0.009			
b. By COLIA1 genotype				
GG	53 / 679 (7.8)	1.0	1.0	
GT	37 / 293 (12.6)	1.7 (1.1 - 2.7)	1.6 (1.0 - 2.6)	
TT	7 / 32 (21.9)	3.7 (1.5 - 9.2)	3.3 (1.3 - 8.4)	
Chi2	11.1			
P Value	0.004			

⁺ "Reference" includes VDR genotypes 22, 23, 33; "Heterozygotes" including 12, 13; "Homozygotes" including 11

* Multivariate Odds Ratios were adjusted for age, weight, and femoral neck BMD.

TABLE 4.
Number of postmenopausal women with fractures and Odds Ratios for fractures according to combined VDR haplotype 1 and COLIA1 genotype

VDR genotype ⁺	COLIA1 genotype			
	GG	GT	TT	GT + TT
<i>a. Number with Fractures/total number (%)</i>				
Reference	13 / 194 (6.7)	2 / 70 (2.9)	0 / 9 (0)	2 / 79 (2.5)
Heterozygotes	27 / 315 (8.6)	18 / 149 (12.1)	3 / 12 (25.0)	21 / 161 (13.0)
Homozygotes	13 / 170 (7.6)	17 / 74 (23.0)	4 / 11 (36.4)	21 / 85 (24.7)
Chi2	0.59	13.3	3.94	17.3
P Value	0.74	0.001	0.14	0.0002
<i>b. Age-adjusted Odds Ratio (95% CI)*</i>				
Reference	1.0	0.4 (0.1 - 2.0)	.1†	0.4 (0.1 - 1.8)
Heterozygotes	1.3 (0.6 - 2.5)	1.9 (0.9 - 4.1)	4.8 (1.1 - 21)	2.1 (1.0 - 4.4)
Homozygotes	1.2 (0.5 - 2.7)	4.1 (1.9 - 8.5)	7.1 (1.8 - 29)	4.4 (2.0 - 9.4)

+ "Reference" includes VDR genotypes 22, 23, 33; "Heterozygotes" includes 12, 13; "Homozygotes" includes 11

* Odds Ratios were calculated with women with both the VDR haplotype 1 reference genotype and the COLIA1 GG genotype as reference group. Based on the small numbers of the COLIA1 TT genotype group and the similar trends we observed for the COLIA1 GT and the COLIA1 TT genotype groups, we calculated Odds Ratios for the combined COLIA1 GT+TT genotype group.

† Zero cases in the cell precluded the calculation of the Odds Ratio in the COLIA1 TT genotype group.

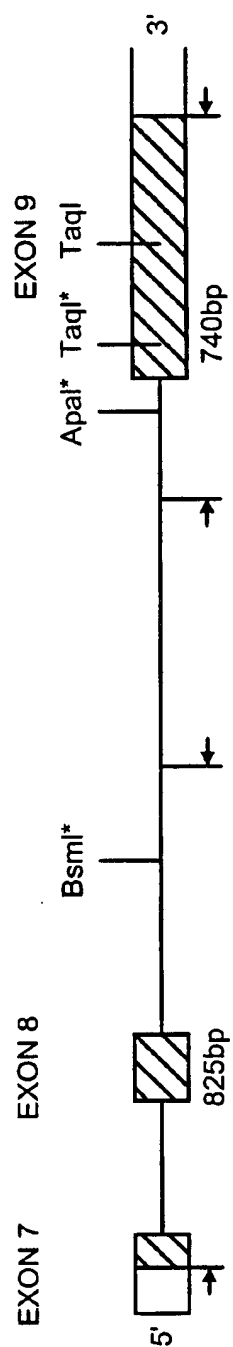


FIG. 1